Mathematics
Algebra 1: Academic
Unit 6: Solving and Graphing Linear Inequalities

Essential Understandings	▪ Solving and graphing linear inequalities is a very important Algebraic skill.
Essential Questions	▪ How do you solve inequalities using addition and subtraction? ▪ How do you solve inequalities using multiplication and division? ▪ How do you solve multi-step inequalities? ▪ How do you solve inequalities with "and" or "or."?
Essential Knowledge	▪ Inequalities will be solved by addition and subtraction. ▪ Inequalities will be solved by multiplying and dividing. ▪ Multi-step equalities will be solved. ▪ Inequalities involving "and" and "or" will be solved.
Vocabulary	▪ <u>Terms</u>: ○ single step inequalities, multi-step inequalities, multiplication and division property of inequalities, graph of inequalities, compound inequalities, "AND" inequalities, "OR" inequalities.
Essential Skills	▪ Solve inequalities using addition and subtraction. ▪ Solve inequalities using multiplication and division. ▪ Solve multi-step inequalities. ▪ Solve inequalities with "and" or "or."

Related Maine Learning Results	<u>Mathematics</u>
	D. Algebra
	  Symbols and Expressions
	  D1.Students understand and use polynomials and expressions with rational exponents.
	    a. Simplify expressions including those with rational numbers.
	  Equations and Inequalities
	  D2.Students solve families of equations and inequalities.
	    d. Solve absolute value equations and inequalities and interpret the results.

Sample Lessons And Activities	▪ Students will orally respond to questions. ▪ Students will utilize worksheets and in their notes to demonstrate individual understanding of the concepts.
Sample Classroom Assessment Methods	▪ Quizzes ▪ Take-home worksheets ▪ Tests
Sample Resources	▪ <u>Publications:</u> ○ <u>Algebra</u> -Foerster